

Date: Tue, 26 Jul 94 04:30:22 PDT  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V94 #210  
To: Ham-Homebrew

Ham-Homebrew Digest                Tue, 26 Jul 94                Volume 94 : Issue 210

Today's Topics:

Building a house: Special Considerations?  
Does anyone have info on QEX? (2 msgs)  
FM amp to operate on SSB (2 msgs)  
VHF/UHF Coax switches

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Mon, 25 Jul 1994 15:45:15 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!swrinde!sgiblab!cs.uoregon.edu!  
reuter.cse.ogi.edu!hp-cv!hp-pcd!hpcvsnz!tomb@network.ucsd.edu  
Subject: Building a house: Special Considerations?  
To: ham-homebrew@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:  
: In article <30pfuv\$kt8@hammer.msfc.nasa.gov> richard.krum@msfc.nasa.gov (Da Boss  
Troll) writes:  
: >  
: >Course, I hate sorting out all the wires when the house is finished. Markers  
always  
: >seem to evaporate when I come in to hook stuff up. <sigh>  
  
: Always put clear heatshrink over the wire numbers. That'll make them  
: stay on.

Good idea, though labor-intensive. A couple alternatives to consider:  
wire markers with built-in protection (I have a roll of this stuff: white

area for marking with a clear leader that covers the marking when wrapped around the wire), and simply writing directly on the wire with something like a "sharpie" magic marker. In gray or white pvc insulation, this becomes nearly indestructible, save cutting off the end of the wire. Of course, it doesn't work very well on Teflon insulated wire or for black-jacketed wire.

Does anyone make pre-numbered clear (since the numbers are going to be inside where they won't abrade off) heat-shrink sleeves? That would be very nice, requiring only a heat source to apply.

73, K7ITM

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Date: Mon, 25 Jul 1994 22:21:22 GMT  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!  
darwin.sura.net!fconvx.ncifcrf.gov!mack@network.ucsd.edu  
Subject: Does anyone have info on QEX?  
To: ham-homebrew@ucsd.edu

In article <30kdq3\$m4l@search01.news.aol.com> paulbreed@aol.com (PaulBreed)  
writes:

>I have seen many references to QEX lately, and I don't know what it is  
>about and who publishes it?

>  
>Thanks in Advance

It's a short (24p about) publication by the ARRL, designed for  
experimenters. It's the technical stuff that should be in QST  
as far as I'm concerned, but the League has decided to cull out  
those parts and publish them separately. It comes out every month.

Joe Mack NA3T  
mack@ncifcrf.gov

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Date: 25 Jul 1994 22:53:34 GMT  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!newsserver.jvnc.net!  
news.cac.psu.edu!news.pop.psu.edu!psuvax1!news.cc.swarthmore.edu!  
netnews.upenn.edu!netnews.upenn.edu!yee@network.ucsd.edu  
Subject: Does anyone have info on QEX?  
To: ham-homebrew@ucsd.edu

>It's a short (24p about) publication by the ARRL, designed for  
>experimenters. It's the technical stuff that should be in QST  
>as far as I'm concerned, but the League has decided to cull out  
>those parts and publish them separately. It comes out every month.

If it is truly only 24 pgs, there is barely an excuse NOT to have it in QST. A typical QST is circa 240 pgs long. What is an extra 24 pgs? The existance of QEX can't be explained by the vast amount of material that won't fit into QST. The only possible excuse would be to get an additional subscription fee. If anything, the ARRL should be encouraging experimentation, not discouraging it. Well, c'est la vie.

--

Medical Image Processing Group		73 de Conway Yee, N2JWQ
411 Blockley Hall		EMAIL : yee@mipg.upenn.edu
423 Guardian Drive		TELEPHONE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA)		FAX : 1 (215) 898-9145

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Date: Mon, 25 Jul 1994 16:38:45 GMT  
From: hearst.acc.Virginia.EDU!saips.cv.nrao.edu!sadira.gb.nrao.edu!  
dgordon@uunet.uu.net  
Subject: FM amp to operate on SSB  
To: ham-homebrew@ucsd.edu

I too am looking for information/help to put a 440 MHz linear to be able to operate SSB with. Send info to:

dgordon@nrao.edu

Thanks - David - KB4LCI

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Date: Mon, 25 Jul 1994 21:41:40 GMT  
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!srgenprp!glenne@network.ucsd.edu  
Subject: FM amp to operate on SSB  
To: ham-homebrew@ucsd.edu

David Gordon (dgordon@sadira.gb.nrao.edu) wrote:  
: I too am looking for information/help to put a 440 MHz  
: linear to be able to operate SSB with. Send info to:

Apart from redesigning all class C stages (both match and operating point) for linear service and building a suitable bias supply about the best I can think of is:

insert enough carrier to bring no-audio output to around 10% of peak and just use it that way. The hope is that the carrier will

bias the stage to enough linearity to let SSB through fairly well.

I wouldn't want to make a habit of using it that way without having a look at the resulting spectrum first though.

Glenn Elmore n6gn

amateur IP: glenn@SantaRosa.ampr.org  
Internet:glenne@sri.hp.com

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Date: Mon, 25 Jul 1994 12:19:19 GMT  
From: psinntp!arrl.org!zlau@uunet.uu.net  
Subject: VHF/UHF Coax switches  
To: ham-homebrew@ucsd.edu

Gary Coffman KE4ZV (gary@ke4zv.atl.ga.us) wrote:  
: In article <30psmq\$cuj@enterprise.america.com> beau@enterprise.america.com (J.  
E. Winburn) writes:  
: > I am looking for a standard relay that can be used at VHF frequencies.  
: >Some of the commercial Amp/Preamp units on the market utilize such  
: >relays as opposed to coaxial realys.  
  
: What you do is what the manufacturers do, you put the relay on a  
: network analyzer, measure it's reactances, and absorb them into your  
: circuit design. Most open frame relays can be made to work.

It is my experience that many manufacturers get by without exotic equipment like network analyzers (those who sell to the competitive amateur market).

I suspect that many merely add the relays to existing amps/preamps and retune the matching circuits by hand, optimizing the preamp with a NF meter and tweaking the power amp with a wattmeter. I'd love to hear from manufacturers who actually do it differently. Incidentally, it ought to be possible to build a pretty decent NF meter using the noise source we published in QST, a precision attenuator to bring the excess noise ratio down to 5 dB, and a AM receiver/DSP/computer setup. (something I'd work on if I didn't have other neat ideas to work on...)

True, one of the better ways to design circuits is to completely characterize the parts and then use expensive (new car priced) computer models, but getting accurate VHF measurements on devices like GaAs FETs is difficult. Anyone know what the noise parameters on a MGF1801 are at 2 meters? And, even if you do get them, the impedance is probably high enough that modeling is difficult--the

little stray reactances will skew the model.  
: Note: the reactances will often differ considerably between the open  
: and closed state of the relay. You can use this to your advantage  
: with the proper circuit topology.

--  
Zack Lau KH6CP/1                    2 way QRP WAS  
    8 States on 10 GHz  
Internet: zlau@arrl.org    10 grids on 2304 MHz

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Date: 25 Jul 1994 18:36:51 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!math.ohio-state.edu!  
magnus.acs.ohio-state.edu!csn!col.hp.com!fc.hp.com!wells@network.ucsd.edu  
To: ham-homebrew@ucsd.edu

References <2vg5dk\$3d0@jabba.cybernetics.net>, <30mlj6\$kee@tadpole.fc.hp.com>, <1994Jul22.135039.27646@arrl.org>com  
Subject : Re: RF Feedback in Mic while talking and touching mic.

Zack Lau (KH6CP) (zlau@arrl.org) wrote:  
: John Wells WA0LHB (wells@fc.hp.com) wrote:  
  
: : : >a 3.5" whip on top.  
: : ^^^^

: I don't know what you are using, by punching the numbers in my HP  
: calculator gives me a frequency of 843 MHz. Perhaps you are confusing  
: feet with inches.

000000Ps! My eyes get tired after reading notes all day ;-) Right you are!  
\*~843 Mhz for 3 and a half inches\*.

: UK amateurs have had the 70 MHz for quite some time. I wonder how many  
: remember the calls of the first stations to work crossband 50/70 MHz  
: across the Atlantic?  
Chris Schmidt who wrote the original posting is at the address of  
<cschmidt@dirialect.me.pvamu.edu> which I beleave is in the US so the discussion  
of 70 mhz for US usage (TX) wouldn't apply..... or would it? ;-)

John WA0LHB

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Date: 25 Jul 1994 15:23:21 GMT  
From: europa.eng.gtefsd.com!news.msfc.nasa.gov!usenet@uunet.uu.net

To: ham-homebrew@ucsd.edu

References <CtCv0x.BH6@comtrol.com>, <30pfuv\$kt8@hammer.msfc.nasa.gov>, <1994Jul23.040319.426@ke4zv.atl.ga.us>

Subject : Re: Building a house: Special Considerations?

In article <1994Jul23.040319.426@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) says:

>

>In article <30pfuv\$kt8@hammer.msfc.nasa.gov> richard.krum@msfc.nasa.gov (Da Boss Troll) writes:

>>

>>Course, I hate sorting out all the wires when the house is finished. Markers always

>>seem to evaporate when I come in to hook stuff up. <sigh>

>

>Always put clear heatshrink over the wire numbers. That'll make them  
>stay on.

Problem is that the drywall guy, the electricians, and the bricker all abuse the ends of the wires. I had better luck this time using color-coding tape.

I have also used some self-laminating markers that can be written on, then wrap around themselves to seal in the info.

Usually I just ring them out with a cheap RS digital ohmmeter with a continuity beeper in the basement, and a kid with a cheap walkie-talkie at the other end.

Whatever works!

--Rich, KE4GNK

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Date: Mon, 25 Jul 1994 13:55:03 GMT

From: ihnp4.ucsd.edu!swrinde!emory!cherry.atlanta.com!nanovx!kd4dts!

jcw@network.ucsd.edu

To: ham-homebrew@ucsd.edu

References <Ct5A12.3x7@wybbs.mi.org>, <YEE.94Jul21012122@mipgsun.mipg.upenn.edu>, <FAUNT.94Jul21213733@netcom11.netcom.com>

Subject : Re: Building a house: Special Considerations?

faunt@netcom11.netcom.com (Doug Faunt N6TQS 510-655-8604) writes:

I personally like to run wire that's 2-3 times more than you'll ever need. Wire is cheap, and so are circuit breakers. Having to re-pull if you decide you need more power is time consuming, and expensive once the walls are up.

I added outlets in my basement, and never use anything less than 12 gauge. The circuits are all rated for 20 amps, and that's primarily because I'm using standard service outlets. I also limit it to 3-4 outlets per 20 amp circuit.

Of course, some people say that if my house ever shifts on the foundation, I can straighten it up by torqueing the extra wiring I've added.

>So, how much current at 220 is enough? Is a 20A 220V circuit enough,  
>or should that circuit be pulled with #10 or #8?

>73, doug

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John C. Wren (kd4dts) | "The UNIX operating system has a command, NICE,  
jcw@kd4dts.atl.ga.us | which allows a user to voluntarily reduce the  
..!emory!wa4mei!kd4dts!jcw | priority of his process, in order to be nice to

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End of Ham-Homebrew Digest V94 #210

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